

**Clean Version of Amended Claims:**

1 9. A process for controlling the pressure within a chamber, comprising the steps of:

2 *Sub 11* generating a pressure sensor signal responsive to the pressure in said chamber;

3 *B* generating a step command signal responsive to said pressure sensor signal and a tool  
4 logic signal, said step command signal generating comprising applying a pressure control  
5 algorithm to said pressure sensor and tool logic signals;

6 generating a direction/speed command signal responsive to said step command signal  
7 and a valve position feedback signal, said direction/speed command signal generating  
8 comprising applying a position control algorithm to said step command and valve position  
9 feedback signals;

10 actuating a valve responsive to said direction/speed command signal, said actuating  
11 resulting in said valve residing in a position, said valve in fluid communication with said  
12 chamber;

13 generating a valve position error feedback signal responsive to said position of said  
14 valve; and

15 repeating said direction/speed command signal generating step, said actuating step  
16 and said valve position error generating step substituting said valve position error feedback  
17 signal for said valve position feedback signal.

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2 14. A process for controlling the fluid flow through a conduit, comprising the steps of:

3 *B* generating a flow sensor signal responsive to the flow in said conduit;

4 generating a step command signal responsive to said flow sensor signal and a tool logic  
5 signal, said step command signal generating comprising applying a pressure control algorithm to  
6 said pressure sensor and tool logic signals;

7 generating a direction/speed command signal responsive to said step command signal and a  
8 valve position feedback signal, said direction/speed command signal generating comprising  
9 applying a position control algorithm to said step command and valve position feedback signals;  
10 actuating a valve responsive to said direction/speed command signal, said actuating resulting  
11 in said valve residing in a position, said valve in fluid communication with said conduit;  
12 generating a valve position error feedback signal responsive to said position of said valve;  
13 and  
14 repeating said direction/speed command signal generating step, said actuating step and said  
15 valve position error generating step substituting said valve position error feedback signal for said  
16 valve position feedback signal.

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